BEFORE THE SHORELINES HEARINGS BOARD
STATE OF WASHINGTON

PROTECT THE PENINSULA'S FUTURE, Appellant, v. CLALLAM COUNTY and CITY OF SEQUIM, Respondent.	SHB No. 89-58 FINAL FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

This matter came on for hearing before the Washington State Shorelines Hearings Board, William A. Harrison, Administrative Appeals Judge, presiding, and Board Members Judith A. Bendor, Chair; Harold S. Zimmerman, Nancy Burnett, Robert C. Schofield and Gordon F. Crandall.

The matter is a request for review of a shoreline permit granted by Clallam County to the City of Sequim for expansion of a sanitary sewer outfall.

Appearances were as follows:

1. Appellant Protect the Peninsula's Future by Peter J. Eglick and Henryk J. Hiller, Attorneys at Law.

2. Respondent City of Sequim by Ken D. Williams and Alexander W. Mackie, Attorneys at Law.

3. Respondent Clallam County did not appear.

The hearing was conducted at Seattle and Lacey on June 14, 15, 18, 19, 20, 21 and 22, 1990. In all, seven days were devoted to the

hearing on the merits. Closing argument was by briefs filed July 16, July 25 and August 13, 1990.

Gene Barker and Associates provided court reporting services. Witnesses were sworn and testified. Exhibits were examined. From testimony heard and exhibits examined, the Shorelines Hearings Board makes these

FINDINGS OF FACT

I

This matter arises on the Strait of Juan de Fuca near Sequim Bay in Clallam County.

II

The City of Sequim, like many communities, has a sewage treatment plant which formerly provided only primary treatment. The primary effluent was discharged through an outfall pipe off Gibson Spit to the Strait at a depth of only 10 feet.

III

The City has now installed secondary treatment facilities at its sewage treatment plant. The chlorinated, secondary effluent is also discharged from the existing outfall. However, the present parties have settled a prior appeal to this Board, SHB No. 83-24, by agreeing to examine alternatives to the present outfall.

IV

Consistent with the settlement agreement, an environmental impact

statement (EIS) was prepared to examine both marine and land discharge of the effluent. The EIS reviewed these alternatives:

Marine Discharge:

1. No action.

2A. Extend existing outfall to a depth of 30 feet.

2B. Extend existing outfall to a depth of 60 feet.

3. Discharge near Port Williams.

4. Discharge near Grays Marsh.

5. Discharge off Travis Spit.

Land Application

6. Schmuck Road site.

7. Miller Peninsula site.

Mixed or Other:

8. Land Application with intermittent marine discharge.

9. Tidal discharge.

10. Aquatic plant treatment systems.

V

The EIS did not state a preferred alternative. After consideration of the EIS, the City chose as its proposal an alternative similar to 2A. and 2B., namely, to extend the existing outfall to a depth of 50 feet. The existing outfall, which is 600 feet long, would be extended by 1320 feet under the proposal. The overall length of the outfall would then be approximately 1/3 of a mile.

VI

The depth of 50 feet was proposed rather than 30 feet or 60 feet as described in the EIS, because the desired dilution (100:1) could be achieved at 50 feet without going to a greater depth. The probable significant adverse environmental impacts of the 50 foot proposal are covered by the 30 foot and 60 foot alternatives of the EIS.

VII

On appeal by Protect the Peninsula's Future, the Board of Clallam County Commissioners determined the EIS to be adequate. The Board of Clallam County Commissioners also approved the City's application for a shoreline permit for extension of the existing outfall as proposed. The permit was issued on August 22, 1989. Appellant Protect the Peninsula's Future, requested review from this Board on September 27, 1989.

VIII

Appellant urges that the Board of County Commissioners did not consider the alternatives to the City's proposal. We find that the County did consider the alternatives in assessing the impacts of the proposal. The environmental impact statement setting forth the alternatives was adopted by the Commissioners. Permit for Shoreline Substantial Development, paragraph 8 of Findings.

IX

The factual disputes in this matter concern the environmental

effects of the proposed outfall. Chiefly, the effects at issue are 1) the potential, if any, for disease transmission (viruses, bacteria), 2) the potential, if any, for nutrient production to trigger algal growth, 3) the effect upon commercial clam harvest (geoducks) or 4) recreational clam harvest.

X

Potential disease transmission. Appellant urges that during feeding, bivalve mollusks (such as clams) can accumulate human viruses when present in sewage-polluted seawater. This has been demonstrated by transmission of infectious hepatitis virus through consumption of raw or inadequately cooked shellfish. Certain other viruses may even survive cooking. The key consideration, however, is not whether such transmission of virus can occur in sewage-polluted seawater, but whether it is likely to occur in seawater to which there has been a discharge of secondarily treated sewage effluent. On this point the EIS states:

> *Given existing information, we cannot estimate the risk of viral contamination of shellfish resulting from discharge of effluent to receiving waters with any degree of confidence. We can, however, state that the potential cumulative impact from marine discharge of sewage effluent will be an increased likelihood of viral contamination of sediments, with accompanying potential for shellfish contamination. The areas that will be most impacted are those beaches closest to the effluent discharge, particularly Battelle Beach and Travis Spit. Judging from the incidence of viral illness associated with consumption of shellfish throughout the state (including areas adjacent to wastewater discharges of substantially greater discharge volumes than the ultimate projected flow at Sequim) the risk is low.* (Emphasis added.) P. 4-108

XI

Despite the low risk of disease transmission, because secondarily treated sewage effluent is involved, the County imposed conditions requiring the City to monitor the impacts of the outfall on shellfish. Permit conditions 4 and 5.

XII

Another indicator for potential disease transmission is fecal coliform bacteria. The standard for approved shellfish growing waters is a geometric mean not greater than 14 organisms/100 ml with not more than 10% greater than 43 organisms/100 ml. The mean concentration of fecal coliforms near the outfall has been on the order of 2 to 4 organisms/100 ml from 1985-1990. Data from 1986, 1987 and 1988 showing specific sampling points in the vicinity of the outfall show compliance with the shellfish growing standard for fecal coliforms. These also show compliance with that standard for all of Sequim Bay except its southern-most tip.

XIII

Fecal coliform is measured by the dip method for collecting the water sample, not by skimming the water surface. WAC 173-201-035(10), 40 CFR Part 136, and EPA-600/8-78-017, pp. 8 and 9. Appellant urges, perhaps correctly, that the surface micro layer of water holds more fecal coliform or other contaminants than the water below. Yet, with fecal coliform levels as shown, the waters of Sequim Bay are unlikely to be contaminated by the proposed outfall.

XIV

The proposed outfall is not likely to result in the transmission of disease nor contamination of the water or aquatic life.

XV

Nutrient production. One of the major potential impacts of the proposed increase in sewage discharges by the City is an increase in the nutrients in Sequim Bay. Excessive nutrient inputs could increase algal growth to such an extent that the aesthetic quality of the Bay is impaired. More severe water quality problems are also associated with lower levels of dissolved oxygen when such algae dies and decays.

To measure whether nutrient inputs would be excessive so as to have the above results, the City consulted an expert on this issue. The resulting report appears in the EIS at appendix D. The chief nutrient of concern is nitrogen.

XVI

The proposed secondary effluent outfall would load far less nitrogen to Sequim Bay than the waters of the Strait of Juan de Fuca which are naturally rich in nitrogen. On this point the EIS states:

> *All of the anthropogenic and runoff sources are minimal, however, in comparison to the loading entering the Bay in the marine waters from the Strait of Juan de Fuca. Even assuming that only one-third of the incoming water is new water from the Strait (and assuming the remaining two-thirds is Sequim Bay water that is nutrient-depleted and had exited the Bay on a previous tide) the total present and planned future STP discharges would be less than 0.2 percent of the natural marine influx of inorganic nitrogen to the Bay. Given these figures, it is not hard to understand why the water quality data presented above do not show trends that reflect anthropogenic influences to the Bay.* (Emphasis added.) Appendix D-4.

It is not known with precision what increase in nitrogen loadings can trigger an algal bloom. However, variation in natural nitrogen inflow to Sequim Bay can reach 25%. It is therefore quite conservative to become concerned when nitrogen loadings due to human activity exceed a 1% increase. (We take official notice that the 1% increase in nitrogen loading is the guideline used in siting aquaculture net pens, which are also a source of nitrogen). In this case the predicted increase of 0.2% is well within even the conservative 1% threshold, and is not likely to trigger algal growth or related effects in Sequim Bay. The proposed outfall can be expected to make a neglible nutrient contribution to Sequim Bay.

XVII

Another means of assessing nitrogen impact is to predict the increase in Sequim Bay nitrogen concentration as a result of the outfall. Again, a conservative threshold for concern would be a 1% increase. At p. D-5 of the EIS the maximum increase due to the outfall is predicted as .0004 mg/l. As background concentration is about 1 mg/l this represents an increase of 0.04%, or well below the 1% threshold of concern. This percentage increase assumed the present average flow of .3 million gallons per day (mgd) from the outfall. This is associated with the City's present population of 3,000-4,000 persons. After 2015, the EIS assumes an ultimate average flow for the outfall of 1.32 mgd at a city population of 16,000. With flow

increasing from .3 to 1.32 (a factor of 4.4) the percentage nitrogen increase would similarly be expected to increase. Thus, 0.04% could ultimately (multiplied by a factor of 4.4) be 0.176%, still well below levels of concern.

XVIII

The impact of all other human sources of nitrogen to Sequim Bay (such as faulty septic systems) would increase nitrogen concentration in the Bay by .0003 mg/l. The cumulative effect of this plus .0004 mg/l from the outfall total .0007 mg/l or 0.07% increase at current population. This equals a .308% increase when multiplied by a factor of 4.4 when Sequim population is 16,000. This, too, is well below levels of concern.

XIX

Trace nutrients such as iron, zinc, and others are not likely to stimulate algal growth in Sequim Bay.

XX

Nutrients from the proposed outfall are not likely to increase algal growth significantly in Sequim Bay.

XXI

The above analysis of nitrogen loading and concentration was based upon all nitrogen to be discharged from the proposed outfall. Its results can therefore be applied to the immediate vicinity of the outfall as well as Sequim Bay. Near the outfall currents are swift.

Nutrients from the proposed outfall are not likely to increase algal growth significantly in the vicinity of the outfall. It has not been shown that eelgrass or seagrass near the outfall would be significantly affected by the proposal.

XXII

Commercial Clam Harvest (Geoducks). Geoducks are an important commercial resource. Federal rules administered by the State Department of Health require the certification of clam beds before harvest. An area within a half mile radius of the end of a sewage treatment plant outfall is automatically decertified. This decertification is not based upon water quality data. In this case, the Department of Health has no water quality data to contravene the EIS and other evidence which establishes the likelihood of good water quality. Nevertheless, the closure is imposed because of the possibility of plant failure or upset.

XXIII

Similarily, the automatic, commercial decertification does not imply that geoducks or other clams were ever available in commercial numbers in the decertified area. The State Departments of Natural Resources and Fisheries have an atlas of geoduck tracts suitable to commercial harvest. There is no established commercial geoduck tract within one half mile of the proposed outfall according to the atlas. (Exhibit A-31)

XXIV

A diver engaged by appellant examined the sea bed in a 25 foot radius of the end of the proposed outfall. Although geoducks in commercial numbers were found, these were predominantly at a depth of 60 feet or more. Divers descending to 60 feet or below must decompress to avoid the potential for aero-embolism (the bends). Therefore, it is the policy of the State Department of Fisheries not to permit commercial geoduck harvesting at depths approaching 60 feet. An exception might be made where there is a shallow bed in the same lease area to allow divers to alternate deep and shallow dives. There are no commercial numbers of geoducks in shallow waters close to the end of the proposed outfall so as to permit this exception.

XXV

There are no commercial geoduck beds in the immediate vicinity (one half mile) of the proposed outfall.

XXVI

There are commercial decertification areas for clams in Sequim Bay. These are the result, again, of automatic action based upon the presence of a marina, a state park, and boat traffic on the Bay. In this location, as well, no water quality data has been presented to demonstrate lack of compliance with water quality standards for shellfish. Denial of the proposed outfall would not affect the current automatic decertification of commercial clam harvesting in Sequim Bay.

XXVII

It has not been shown that the proposed outfall would result in the closure of any commercial geoduck or other clam harvest.

XXVIII

Recreational Clam Harvest. The federal rules administered by the State Department of Health do not apply to recreational clam harvesting. Therefore, the half mile radius decertification would not restrict recreational harvest. As we have found at Finding of Fact IX, above, the evidence suggests that even the discharge of secondary effluent into the Strait of Juan de Fuca may entail some risk of shellfish contamination on nearby beaches. However, that risk is low.

XXIX

It has not been shown that the proposed outfall would result in a significant adverse effect upon either water quality or clam harvesting, commercial or recreational.

XXX

Any Conclusion of Law deemed to be a Finding of Fact is hereby adopted as such. From these Findings of Fact, the Board makes these

CONCLUSIONS OF LAW

I

Appellant first urges that the environmental impact statement (EIS) is inadequate with regard to alternatives, disclosure of impacts and mitigation measures. The EIS was considered and deemed adequate

by Clallam County. Such a determination of adequacy must be accorded substantial weight. RCW 43.21C.090. The adequacy of the EIS must be "judged by the rule of reason." Cheney v. Montlake Terrace, 87 Wn.2d 338, 552 P.2d 184 (1976). The test is "whether the environmental effects of the proposed action and reasonable alternatives are sufficiently disclosed, discussed and . . . substantiated by supportive opinion and data." Leschi Improvement Council v. Washington State Highway Commission, 84 Wn.2d 271, 525 P.2d 774 (1974). In this matter the EIS addresssed ten alternatives. The environmental impacts of the proposal and alternatives were discussed and substantiated by opinion and data. We conclude that the EIS is adequate.

II

Appellant next urges that the proposed effluent outfall is a "Port and Water Related Industry" under Section 5.10 of the Clallam County Shoreline Master Program (CCSMP). The outfall is proposed for the "conservancy" environment. CCSMP Designation Map. As a "Port and Water Related Industry" the proposal would therefore be prohibited CCSMP Section 5.10 C. 2. b., p. 63. The definition of "Port and Water Related Industry" is:

> *Ports and water related industries are centers for water borne traffic involving commercial shipping, marine terminal operations, and water related industry and manufacturing. CCSP, Section 5.10, p. 63.*

"Sewage treatment facilites" are mentioned in the policies following the definition, Section 5.10 B. 3., p. 63.

We disagree that the proposed outfall is either a sewage treatment facility or a "Port and Water Related Industry." The treatment of sewage occurs at the municipal treatment plant which, in this case, is not on the shorelines. The outfall in question merely transmits the chlorinated, treated effluent to its point of discharge and does not involve treatment. Transmission is not treatment.

III

The proposed outfall is classified by the CCSMP under "Utilities" which are defined as follows:

> *Utilities are services which produce or transmit electrical energy, gas (sic) sewage, communications, oil and provide service to the infra-structure within the County. CCSMP Section 5.09, p. 60.*

While the treated secondary effluent to be transmitted from the proposed outfall is far from being raw sewage, nevertheless, as a derivative of sewage, the effluent comes within the broad term "sewage" as used in the CCSMP definition of utilities.

IV

With regard to whether utilities are a permitted use, the CCSMP provides:

> *Utilities are permitted in all environments, subject to the policies and general regulations. CCSMP Section 5.09, p. 61.*

V

The proposed outfall is consistent with the policies and general regulations for utilities at CCSMP Section 5.09, pp 60-61.

VI

The policies for the "conservancy" environment must also be considered in determining whether a particular utility is permitted since CCSP Section 5.09, above, permits utilities "subject to the policies." The policies for the conservancy environment include these:

1. The preferred uses in this environment are those which are non-consumptive of the physical and biological resources of the area . . . CCSMP Section 3.03 (C)(5). See also -(B). pp. 10-11.

2. Activities on the shorelines of a conservancy environment will be limited to those which preserve the existing resources including scenic vistas, historic sites and aesthetic qualities CCSMP Section 3.03 (C)(6).

The "resources" spoken of would include the water quality, clams, seagrass and similar resources addressed by the evidence here. It has not been shown that the proposed outfall would significantly adversely affect or consume these resources. To the contrary, the evidence indicates that these resources will be preserved. We conclude that the proposed outfall is consistent with the conservancy environment policies cited to us.

VII

Additional policies are made applicable to marine beaches in the conservancy environment. In pertinent part these are:

> 1. Marine beaches shall be used solely for recreation, education and conservation purposes. CCSMP Section 4.01, p. 20.
>
> 2. Dumping of foreign material is prohibited. CCSMP Section 4.01, p. 20.

The term "marine beach" means:

> *That portion of the saltwater shoreline area formed by contemporary wave and tidal action. The marine beach is the zone of unconsolidated material that extends landward from the extreme low water line to the place on land where there is a marked change in material or physiographic form. Berms and backshores are included in marine beaches. CCSMP Glossary, No. 59, p. 121.*

VIII

The proposed outfall is not proposed for construction landward of low tide, and thus is not proposed on a marine beach. It does extend an existing outfall which crosses the beach. While justifiably concerned for recreational clamming on the beach, appellant has nonetheless failed to prove that the extended outfall would significantly adversely affect that recreation or other recreational, educational, or conservational use of the beach. The proposed outfall is consistent with Marine Beach policy 1 of the CCSMP, above.

IX

The policy against dumping of foreign material on marine beaches

is cited by appellant, but is inapposite. The discharge of effluent proposed here, even if broadly considered "dumping" does not occur on a marine beach, that is, above low tide. The argument advanced by appellant is that some effluent, though diluted and only in unknown part, must be borne by the waves back to the beach where the outfall enters the water. The intervention of the waters as an intermediate carrier precludes the process from being characterized as "dumping" onto a "marine beach". This is not to say that foreign material may be "dumped" to the water with impunity. Other policies within the CCSMP such as that favoring uses which are non-consumptive of resources, CCSMP Section 3.03(C)(5), above, and, indeed, policies of the Shoreline Management Act itself would protect against adverse effect to the land and water. See RCW 90.58.020. Appellant has not shown such adverse effect here. Marine Beach policy 2 of CCSMP prohibiting dumping of foreign material onto marine beaches is not applicable to the facts of this case.

X

Appellant next cites this policy applicable to the rural environment:

> *Discharge of sewage, animal wastes, pesticides, fertilizers, or other agricultural chemicals into the water of bays or coves is prohibited. CCSP Section 4.07 C. 2., p. 27.*

This policy is also inapposite. The proposed outfall discharges into

the water of the Strait of Juan de Fuca in the conservancy environment. Some effluent, dilute and in unknown part, will be borne by tide and current into Sequim Bay, a rural environment. Again, this cannot be characterized as "discharge . . . " into the water of bays" in the rural environment. Nor has appellant shown an actual adverse effect from the effluent entering Sequim Bay so as to invoke other policies referred to in the prior conclusion of law. The rural environment policy against discharge into the water of bays, above, is not applicable to the facts of this case.

XI

No issue herein is barred by waiver, laches or estoppel.

XII

We have carefully considered the other contentions of appellant and find them to be without merit.

XIII

Both appellant and respondent challenge conditions 4 and 5 of the permit which require monitoring of the effluent discharge and assessment of effects upon recreational shellfish beds. We conclude that the conditions are reasonable and should be sustained. The information to be gained by the monitoring is not needed as a basis for the instant decision made by Clallam County to grant the permit. The evidence before us shows no probable, significant adverse effects from the proposed outfall. However, the conditions are suitable

precautionary measures intended to yield information for possible future use. See Kitsap County v. State, 107 Wn.2d 801, 733 P.2d 526 (1987).

XIV

Respondents challenge Condition 3 of the permit requiring burial of the proposed outfall under the sea floor. We conclude that this condition is consistent with CSMP Section 5.09 C.1. b., p. 60 which states:

> *Utility lines shall be placed underground whenever practical.*

The condition is reasonable and should be sustained.

XV

Respondents challenge conditions 6 and 7 of the permit requiring, an area for the public to take effluent samples and a showing of consistency with the City's NPDES permit. These are reasonable, water quality based conditions which should be sustained.

XVI

Any Finding of Fact deemed to be a Conclusions of Law is hereby adopted as such. From these Conclusions of Law, the Board enters this

ORDER

The shoreline substantial development permit granted by Clallam County to the City of Sequim to expand the existing sanitary sewer outfall is hereby affirmed.

DONE at Lacey, WA, this 27th day of December, 1990.

SHORELINES HEARINGS BOARD

JUDITH A. BENDOR, Chair

HAROLD S. ZIMMERMAN, Member

NANCY BURNETT, Member

ROBERT C. SCHOFIELD, Member

GORDON F. CRANDALL, Member

WILLIAM A. HARRISON
Adminstrative Appeals Judge